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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,806	04/09/2004	Joo Won Kim	K-0631	8862
34610 7590 04/10/2007 KED & ASSOCIATES, LLP P.O. Box 221200 Chantilly, VA 20153-1200			EXAMINER YENKE, BRIAN P	
			ART UNIT 2622	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE			MAIL DATE	
3 MONTHS			04/10/2007	
			DELIVERY MODE PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/820,806

Applicant(s)

KIM, JOO WON

Examiner

BRIAN P. YENKE

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on Amendment (30 Jan 07).
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments filed 30 Jan 07 have been fully considered but they are not persuasive.

***Applicant's Arguments***

a) Applicant states that Cohen-Solal discloses a system which controls the size and position, and thus does not suggest the shape of the PIP.

b) Applicant states Cohen-Solal does not teach or suggest providing a menu which allows a user to select or modify the shape of the PIP.

c) Applicant states that Janevski does not disclose does not disclose the various shapes being determined by a user.

***Examiner's Response***

a) The examiner disagrees. Given the broadest reasonable interpretation, when changing the size of the PIP a user may change the PIP to be equal on all sides (thus a square shape) or be unequal (thus a rectangular shape), thereby meeting the claimed limitation. The applicant also admits that the Cohen-Solal may display a square or rectangle as stated in the remarks (page 10).

b) The examiner disagrees. Given the broadest reasonable interpretation, the user may change the size/position (be it rectangular or square), wherein the menu (i.e. display) is the actual display of the tentative PIP, wherein the user may alter the tentative PIP further to suit his/her needs.

c) The examiner agrees, that Janevski discloses an automatic shape selection based upon image content wherein the system based upon the user's selection determines the ideal shape, position, size, transparency of the PIP image based upon image content. Although, Janevski discloses automatically performing such selection/operation, the manual mode or automatic mode of operation are considered to be obvious modifications to one of ordinary skill in the art, since each has their own advantages/disadvantages, as well as systems which may be placed into the automatic or manual mode.

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The examiner incorporated Janevski which discloses the variety of shapes may be utilized for a PIP display, to support Cohen-Solal which discloses altering the size/position (which may produce a square or rectangular PIP) by user control.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-35 rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen-Solal US 2002/0075407 in view of Suh, US 5,831,591.

In considering claims 1, 11 and 32-35

Cohen-Solal discloses a PIP system which repositions and/or resizes (meeting the shape limitation i.e. square, rectangle), based upon the user activating a PIP 136A analysis mode via remote (Fig 1), where the user can also select a desired mode (position/size) of the sub-screen by utilizing button 136B (PIP mode select button).

However, Cohen-Solal does not explicitly recite the conventional elements of processing/controlling two video signals for display.

Although, it is notoriously well known to use a processor for both signals and a microcomputer to control such, the examiner nonetheless evidences on such method by relying on Suh, US 5,831,591, which discloses a double window processing unit 100 (Fig1) along with microcomputer 110, based upon the desired selection from the user (key input).

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Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the conventional components available as evidenced by Suh, in order for Cohen-Solal to actually process/display the main/sub video signals.

In considering claims 2-3, 5-8 and 12-19

Cohen-Solal provides a system which allows the user to activate via PIP 136A (or alternatively 134) an analysis operation where the system determines the ideal size/position of the PIP picture, where the user has the option via PIP136B of changing the size/position/options to his/her desires. The menu displayed in these claims is the actual display of the alternative views provided to the user, when the user sorts through such selections, via button 136B.

In considering claims 4 and 20-21, 27-28

The combination of Cohen-Solal and Suh does not explicitly recite the option for creating and adding new shapes, however the concept of allowing the user to select/create/add different shapes is a conventional feature in order to customize the viewing experience, thus the examiner takes "OFFICIAL NOTICE" regarding as such. In the event the applicant traverses such notice, the examiner requests the applicant to review cited US 20020140861.

In considering claim 9,

Suh disclose a double window processing unit 100 which selects (i.e. switches/multiplexes) between the main and sub picture for the PIP display.

In considering claim 10,

Suh discloses two memories 215, 216 which store the displayed information.

In considering claims 22-24 and 29-30,

The combination of above does not explicitly recite user's creating shapes, such as which are not stored—however the concept of providing the user the ability to use existing shapes (i.e. default shapes) and creating their own shapes (i.e. customizing shapes) are features which are conventional in the TV/Video/PC endeavor wherein user's may select from menus/items which provide default shapes or the user may create their own, thus allowing the user full control over the viewing experience. It is also noted, that user's preference for shapes is a choice/option (design choice) and the use of different shapes

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provides no unexpected results since they provide the user the same result, a circle is a circle and a square is a square. Any PC/TV/editing device may allow the user to select/design/create shapes.

In considering claims 25-26,

The combination of the above references does not disclose the rotating feature as claimed.

Although, it is noted in the TV/virtual/editing field that user's have the ability to preview/review images/data in a 3-D environment, wherein items may be rotated for full viewing, thus the examiner takes "OFFICIAL NOTICE" regarding such, for the advantages as noted above.

In considering claim 31,

Neither the above references disclose the newly added the number of sub-picture data being greater than or equal to two. The concept of displaying one or more PIP's is conventional practice in the TV arts to allow user's the ability to view multiple programs as he/she desires, thus the examiner takes "OFFICIAL NOTICE" regarding such for the advantages as noted.

### ***Conclusion***

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Yenke whose telephone number is (571)272-7359. The examiner work schedule is Monday-Thursday, 0730-1830 hrs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, David L. Ometz, can be reached at (571)272-7593.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

**(571)-273-8300**

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703)305-HELP.

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(TDD) 703-305-7785

An automated message system is available 7 days a week, 24 hours a day providing informational responses to frequently asked questions and the ability to order certain documents. Customer service representatives are available to answer questions, send materials or connect customers with other offices of the USPTO from 8:30 a.m. - 8:00p.m. EST/EDT, Monday-Friday excluding federal holidays.

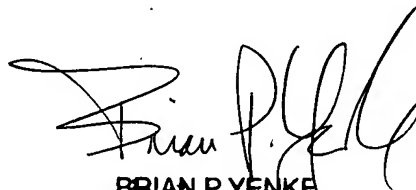
For other technical patent information needs, the Patent Assistance Center can be reached through customer service representatives at the above numbers, Monday through Friday (except federal holidays) from 8:30 a.m. to 5:00 p.m. EST/EDT.

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B.P.Y.  
02 April 2007



BRIAN P. YENKE  
PRIMARY EXAMINER